ART. XXX.—*Rhode Island Nineteenth Registration Report*, 1871. Prepared by EDWARD T. CASWELL, M.D., under the direction of Joshua M. Addeman, Secretary of State. 8vo. pp. 116. Providence, 1872.

Fourth Annual Report of the Secretary of State of the State of Michigan, Relating to the Registry and Return of Births, Marriages, and Deaths for the year 1870. 8vo. pp. 386. Lansing, Mich., 1872.

WERE we able, in the space allowed us, to attempt a detailed and critical review of the tables given in these reports, we fear that few readers would follow us. It is only when statistics are needed for some especial purpose, that labours of this kind are carefully read. Nevertheless, we are sure that all readers of this Journal will be glad to be informed of the earnest and persistent efforts, shown in both the above-named reports, at the accurate statement and intelligent interpretation of facts so important to society and to medicine. There is certainly a growing appreciation and understanding of vital statistics among educated men. Within and without the medical profession we discover a higher and a more discriminating valuation of such facts. In the employ of many States, as well as in the Census Bureau at Washington, are men who have given much time and study to the subject; men who can at least be trusted to avoid the absurd and dangerous errors of some who have preceded them.

Two things are needed to render social and vital statistics valuable: first, thoroughness and intelligent accuracy in gathering facts; second, mathematical ability, clearness of intellect, and breadth of view, to combine, compare, and interpret the materials collected.

About twenty-five years ago the attention of a few leading men in the medical and legal professions in Rhode Island was attracted to the insufficiency and non-enforcement of the early Colonial and State laws as to the recording of births, marriages, and deaths. The evils arising from the limited scope and imperfect execution of existing laws were clearly perceived and stated. An act designed to meet the desired ends was passed by the legislature; but failed, practically, to secure full returns. Two years later the act was amended, and has since continued to subserve better and better every year the objects aimed at. For this we may justly thank the physicians throughout the State, whose intelligent appreciation and coöperation were secured by the wise and zealous labours of a few prominent members of the State Medical Society.

The first of the series of Rhode Island reports appeared nearly twenty years ago. It was based on data confessedly imperfect. From some towns no reports were obtained; and from others, reports manifestly incorrect and even glaringly absurd. Still, the work contained much useful information, and not a little intelligent exposition of the true value and meaning of registration.

From that time to the present the successive annual reports have exhibited great care and high talent. A committee of the State Medical Society has constantly supervised the work, and zealously laboured to procure fulness and accuracy in the returns. This committee has always included men interested in the subject, and especially qualified for their duties. Some of these have served upon the committee year after year, continually adding by experience to the value of their services. Dr. Edwin M. Snow, who has gained a national reputation as a statistician, has been long upon the committee, and, if we remember rightly, during some years the compiler of the report. The present report is the work of Dr. Edward T. Caswell, a gentleman of known culture and intelligence, and who may be presumed to inherit mathematical talent from

his honoured father, long Professor of Mathematics and late ex-President of Brown University.

The representation of the great facts of social life and death is almost exhaustive in both these works. Every fact seems to be presented under every possible relation. Population, according to ages, sex, etc., is taken from the United States census for 1870. Births, marriages, and deaths are compiled from original town and county reports, and are viewed, in all aspects, as to age, sex colour, nativity, parentage, month of year, social position, and almost every other common and uncommon relation. Aggregates and percentages are combined, compared, and manipulated in all imaginable ways. Divorces are included in the Rhode Island report. Meteorological tables are given in both; but the relation of weather to certain diseases is much more fully set forth in the Michigan report.

Causes of death are very fully presented in both works. We are in a little doubt whether, in the Michigan report, the tables be not somewhat too detailed and elaborate. They seem, at least, less easily comprehensible.

In both reports, however, had nothing been given but the naked figures, the reader of ordinary gifts and average industry would have been likely to turn away bewildered. But in the Rhode Island report, especially, all the more important results, observations, and deductions are summarized and interpreted in a manner to interest and instruct even the indifferent reader.

In the Michigan report we have a much larger mass of facts; and apparently an equally zealous and priseworthy aim at thoroughness and accuracy. The amount of labour expended on this document is appalling to contemplate. It is a mine of curious research and ingenious combinations. While it is not pretended that the returns are as full and accurate as in some of her older and more compact sister States, it is evident that Michigan aims as high as the best. The summaries, explanations, and deductions seem to us a little less valuable than those of the older State. Nevertheless, the suggestions and comments are sometimes thoughtful and judicious.

Dr. H. B. Baker, who compiled the Michigan report, is evidently deeply interested in his work. He states that the returns embodied in the present volume are more complete than in either of its predecessors.

In conclusion, we would say that both States may justly be proud of their admirable reports, and of the system which these represent. We would commend the example to all States which have not yet taken a step so imperatively demanded by the interests of civilization and humanity.

B. L. R.

ART. XXXI.—*Evolution of Life.* By HENRY C. CHAPMAN, M.D., Membe
of the Academy of Natural Sciences, Philadelphia. 8vo. pp. 179. Phil
delphia: J. B. Lippincott & Co., 1873.

THE subject of evolution has been tormented by so much unintelligent cr
cism that we welcome with pleasure a concise, well-written compendium of
leading features by one whose training and unusual opportunity have
fitted him for the task. For a first essay it is undoubtedly a bold one, ar
has been creditably accomplished.

No doubt the most difficult department of popularization of science is
of Natural History. Its technology is vast, and far removed from the ex
sions of common life. Its propositions cannot be stated as in physi